

Date: Wednesday, 04/06/2008 1:49:07 PM  
 User: Linda Lacelle

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : 350 SKIDTUBE ASSEMBLY RH  
 Job Number : 39568  
 Estimate Number : 10265  
 P.O. Number :  
 This Issue : 04/06/2008 S.O. No. :  
 Prsht Rev. : NC  
 First Issue : 29/05/2008 Type : SKIDTUBES  
 Previous Run : 39232  
 Written By :  
 Checked & Approved By :  
 Comment :  
 Est Rev:I 02-09-25 Rearranged procedure steps KJ  
 Est Rev:J 06-03-29 As per Rev D EC  
 Est Rev:K 06-07-13 As per dsi9343 EC  
 Est Rev:L 07-07-28 Added SS Wearplates(Rev E) JLM  
 Verified By:EC  
 Est Rev:M 08-04-22 update steps 4,13 DD verified by:EC  
 Part Number : D350636012  
 Drawing Number : D2750 UNDER REVIEW  
 Project Number : N/A MFG. PER DSI 9413 08.06.04  
 Drawing Revision : E  
 Material :  
 Due Date : 19/06/2008 Qty: 1 Um: Each

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



8 08/06/05



08.6.10 JLD

Comment: DOCUMENT CONTROL

Photocopy blue file and type labels per PPP D350-636-012 CHG 005 004 DSI 9413 08.06.04

2.0 D26003BENT Extrusion Bent



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2600-3-Bent

Extrusion (Bent)

238463

BE 08/06/05

3.0 D2744 Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Cap

Batch:

237768 BE 08/06/05

4.0 SKIDTUBES 1 SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1- Mark cut line on aft end of D2600-3-Bent using Jig DT 8150. Cut to length as per Dwg D2750. Deburr end

2-Drill pilot holes as per Dwg D2750 sheet 3 (D2750-1 details).Drill using drill Jig DT8150 & DT8863.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

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Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

3- Mark fwd end for cutting using Drill Jig DT 8150 & DT8863 and cut as per dwg D2750.

4-Drill pilot holes for Detail G using DT8329

5-Open up holes for Detail B to 0.375" (4 holes per side) blade fitting location holes to 0.500" (total of 5 holes per side) as per dwg D2750. Open holes for ground handling and detail E to 0.500" (8 holes per side)

6-Drill pilot holes for wearplates as per Dwg D2750 using DT8108

\*\*\*\*Make sure that wearplate holes are on bottom of tube\*\*\*\*\*

Open 4 aft wearplate holes to 0.250". Open remaining wearplate holes to 0.297".

7-Open up holes of Detail A to 0.297" (total of 2 holes per side)

9-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left from bending as per QSI 004  
A/R Aluminum Rod *M107877 BE 08/06/05*

10-Grind welds flush as per Dwg D2750 *BE 08/06/05*

5.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS



6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP



7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1



Chemical Conversion Coat as per QSI 005 4.1

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION



9.0

D2739

350 I Beam



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Web

Batch:

*B-39672 AUM 8-6-6*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: 9 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR: <u>8</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

10.0

D34901

Cross Bolt Spacer



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Crossbolt spacer

Batch: *239600*

*RF 08/06/09*

11.0

D34903

Cross Bolt Spacer



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Crossbolt spacer

Batch: *233825*

*RF 08/06/09*

12.0

D2743

Crossbolt Spacer



Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

Crossbolt Spacer

Batch: *237767*

*RF 08/06/09*

13.0

SKIDTUBES 1

SKIDTUBESS RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open up holes of Detail E and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750.

2-Open up holes of Detail B to 0.750" (total of 4 holes per side) as per dwg D2750.

3-Open float holes to .500" (4 per Side)

4-Chamfer holes of Detail B, E, ground handling and float holes per dwg D2750 (welding instructions on sheet 4)

5-Deburr and blow out all chips from inside of tube

6-Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015

A/R Sikaflex-291

batch: *7107803*  
exp. date: *8-10-07*

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 4)

*AWM  
8-6-6*

*AWM  
8-6-6*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Seq. #:

Machine Or Operation:

Description :

A/R Aluminum Rod batch: M107877 BE 08/06/09

9-Grind welds flush as per Dwg D2750

10-Spot face ground handling holes section P-P (total of 4 places per side) as per dwg D2750

11-Deburr holes

AWM  
8-6-10  
PD

14.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

8 08/06/12 80

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

8 08/06/12 80

16.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Pressure wash as per QSI 005

M.A 08/06/17

IX

17.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Gloss White (Ref. 4.3.5.1) as per Dart QSI 005 4.3

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

2:15  
3:15  
2:45 RF 08/06/17

IX

18.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Inspect for foreign object per QSI 024

88 08-06-19 80

19.0

ALS41032225

Insert



Comment: Qty.: 42.0000 Each(s)/Unit Total: 42.0000 Each(s)

Insert


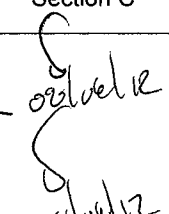
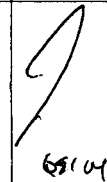
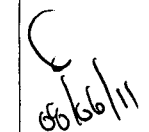
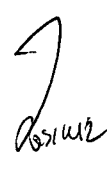

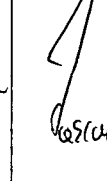
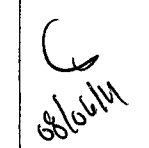
Batch: M100489

88 08-06-19 80

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D350-636-012 PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: P Date: 08/06/11  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR: <u>39568</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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08/06/11	13.8	During the welding inspection it was found that some pin holes were at the 11 <sup>th</sup> hole from aft. During <del>weld</del> welding touch ups some weld splattered		Drill out and Remove affected cross bolt spacer	BE 08/06/11			
				Weld new D3490-1s per QST004 B# 39000 A/R B# 107877	BE 08/06/11			
		m to the cross bolt spacer. when welder tried to remove the splatter splatter the drill caught the AD and ovalized the hole and caused a step in the cross bolt spacer		Grind flush and Deburr.	BE 08/06/11			

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Job Number: 39568

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts as per dwg D2750

JSJ 08-06-19 (X)

21.0

D2745

Bushing



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)

Bushing

Batch: 1339587

JSJ

22.0

D353525

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

WEARSHOE

Batch: 1338162

JSJ

23.0

D353625

Gasket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

GASKET

Batch: 1339234

JSJ

24.0

D35371

Wearpad



Comment: Qty.: 3.0000 Each(s)/Unit Total : 3.0000 Each(s)

WEARPAD

Batch: 1337749

JSJ

25.0

D37911

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Wearplate

Batch: 1339418

JSJ

26.0

D37931

Wearshoe



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Wearshoe

Batch: 1339715

JSJ

08-06-19

(X)

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Job Number: 39568

Part Number: D350636012

Job Number:



Seq. #:	Machine Or Operation:	Description :
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27.0	D37933	Wearshoe
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
Wearshoe 1339812 JLS

28.0	D37941	Gasket
------	--------	--------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
Gasket 1339421 JLS

29.0	D37943	Gasket
------	--------	--------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
Gasket 1339422 JLS

30.0	D36721	Phenolic Washer
------	--------	-----------------



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)  
Phenolic Washer 1339275 JLS

31.0	AN526C1032R10	Screw
------	---------------	-------



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)  
Screw M1108062 JLS

32.0	AN526C1032R18	Screw
------	---------------	-------



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)  
Screw M1108079 JLS

33.0	D36311	Washer
------	--------	--------



Comment: Qty.: 8.0000 Each(s)/Unit Total : 8.0000 Each(s)  
WASHER  
Batch: 1338139 JLS

34.0	D3488042	Blade Fitting Assembly, RH
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)  
Blade Fitting, RH  
Batch: 1338100 JLS

08.04 = 19

(81)

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Job Number: 39568

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

35.0

D3492041

Plug Assembly



Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

PLUG ASSEMBLY

Batch:  $(6 \times) \Rightarrow B38756$   $(2 \times) \Rightarrow B39676$  *yl*

36.0

D3492043

Plug Assembly



Comment: Qty.: 8.0000 Each(s)/Unit Total: 8.0000 Each(s)

PLUG ASSEMBLY

Batch: *B39677* *yl*

37.0

AN3C5A

Bolt



Comment: Qty.: 34.0000 Each(s)/Unit Total: 34.0000 Each(s)

Bolt

Batch: *M1108077* *yl*

38.0

AN3C6A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

Bolt

Batch: *M1108300* *yl*

39.0

AN6C44A

BOLT



Comment: Qty.: 4.0000 Each(s)/Unit Total: 4.0000 Each(s)

BOLT

Batch: *M1108284* *yl*

40.0

AN8C35A

BOLT



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

BOLT

Batch: *M106896* *yl*

41.0

AN960C10L

washer



Comment: Qty.: 38.0000 Each(s)/Unit Total: 38.0000 Each(s)

washer

Batch: *M1108077* *yl* 08-06-19 *yl*

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Job Number: 39568

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

42.0

AN960C816L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: M1107520

JS

43.0

MS210436

NUT



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

NUT

Batch: M1107376

JS

44.0

MS21083C8

NUT



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

NUT

Batch: M1108255

JS

45.0

NAS1515H3L

WASHER



Comment: Qty.: 4.0000 Each(s)/Unit Total : 4.0000 Each(s)

WASHER

Batch: M1107394

JS

46.0

NAS1515H8L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: N/A

JS

08/06/26

47.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3"

batch: M1106096

3-Install blade fitting D3488-042, wearshoes and ground handling hardware as per dwg D2750

SIKA FLEX 241

BATCH: M1107893

EXP DATE: 08/10

JS 08-06-12

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Seq. #:

Machine Or Operation:

Description :

4-Coat all exposed fasteners with "LPS Procyon"

batch: M104251

9/1 03/06/19

(R)

48.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

03/06/19 @

49.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

50.0

D2741

Blade, 350 Skidtube



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Blade

Batch: 36343

All A's sent in

R

51.0

AN960C816L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Washer

Batch: M107520

L

52.0

MS21083C8

NUT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Nut

Batch: M108205

L

53.0

AN8C21A

BOLT



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Bolt

Batch: M107924

L

54.0

NAS1515H8L

WASHER



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: M107581

L 8/12/3 @

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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Job Number:



Seq. #:

Machine Or Operation:

Description :

55.0

D34931

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

WASHER

Batch: B38707

56.0

D35321

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

spacer

Batch: 38161

57.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

58.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Package as per PPP D350-636-012

59.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 08-06-25

13 395 68

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

FOR D350-636-011/-012/-013/-014 SKIDTUBES AT CHG 004, AMEND PARTS LIST OF IIN-D350-636 SECTION 5 AS FOLLOWS:

REMOVE:

Item	Qty -011	Qty -012	Qty -013	Qty -014	Part Number	Description
	X				D350-636-011	SKIDTUBE INSTALLATION, LH, STD AERAZUR/APICAL CYLINDRICAL FLOAT COMPATIBLE
		X			D350-636-012	SKIDTUBE INSTALLATION, RH, STD AERAZUR/APICAL CYLINDRICAL FLOAT COMPATIBLE
			X		D350-636-013	SKIDTUBE INSTALLATION, LH AIRCRUISER/ APICAL TRI-BAG FLOAT COMPATIBLE
				X	D350-636-014	SKIDTUBE INSTALLATION, RH AIRCRUISER/ APICAL TRI-BAG FLOAT COMPATIBLE
*6A	1	1	1	1	AN960C816L	WASHER
6B	2	2	2	2	NAS1515H8L	WASHER
*22	2	2	2	2	D3537-1	WEARPAD
23A	1	1	1	1	D3535-13	WEARSHOE
23B	1	1	1	1	D3536-13	GASKET
25A	1	1	1	1	D3535-35	WEARSHOE
25B	1	1	1	1	D3536-35	GASKET
*26A	4	4	4	4	AN3C5A	BOLT
*26B	4	4	4	4	AN3C7A	BOLT
*27	8	8	8	8	AN960C10L	WASHER

\*SUBTRACT FROM TOTAL QUANTITY OF PARTS INDICATED IN INSTALLATION INSTRUCTIONS IIN-D350-636

ADD:

Qty -011	Qty -012	Qty -013	Qty -014	Part Number	Description
X				D350-636-011	SKIDTUBE INSTALLATION, LH, STD AERAZUR/APICAL CYLINDRICAL FLOAT COMPATIBLE
	X			D350-636-012	SKIDTUBE INSTALLATION, RH, STD AERAZUR/APICAL CYLINDRICAL FLOAT COMPATIBLE
		X		D350-636-013	SKIDTUBE INSTALLATION, LH AIRCRUISER/ APICAL TRI-BAG FLOAT COMPATIBLE
			X	D350-636-014	SKIDTUBE INSTALLATION, RH AIRCRUISER/ APICAL TRI-BAG FLOAT COMPATIBLE
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
8	8	8	8	D3672-1	WASHER
4	4	4	4	AN526C1032R10	SCREW
4	4	4	4	AN526C1032R18	SCREW

REFERENCE ONLY

W/ 39568

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CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9413	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		WEARSHOE MODIFICATION	NTS
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**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

REFERENCE ONLY

# DART SERVICE INSTRUCTION

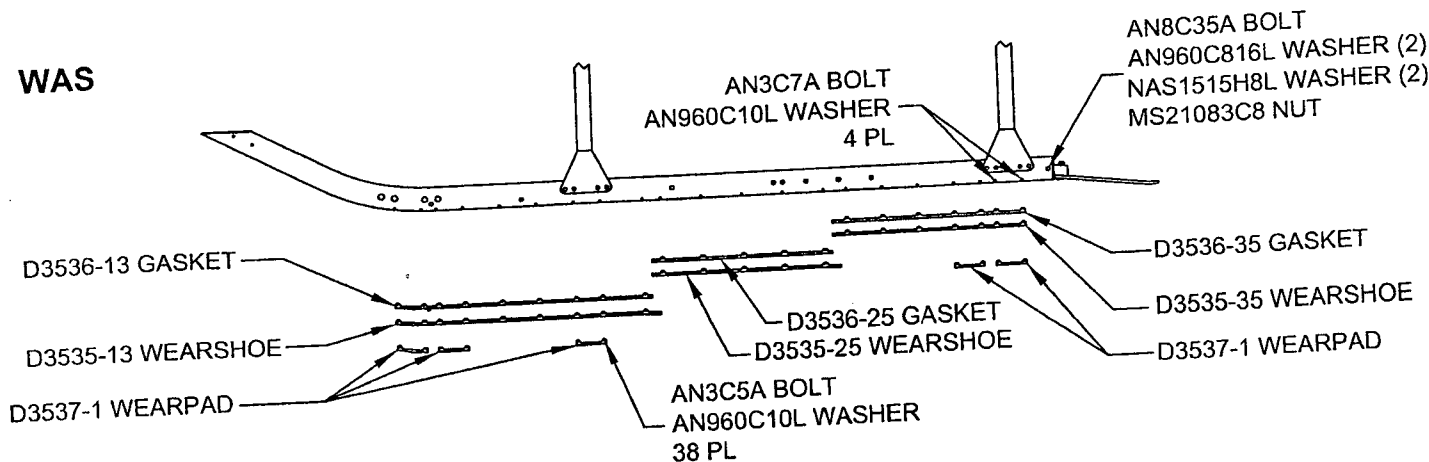
TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-636 REV E

REF FAA STC: SR00646SE

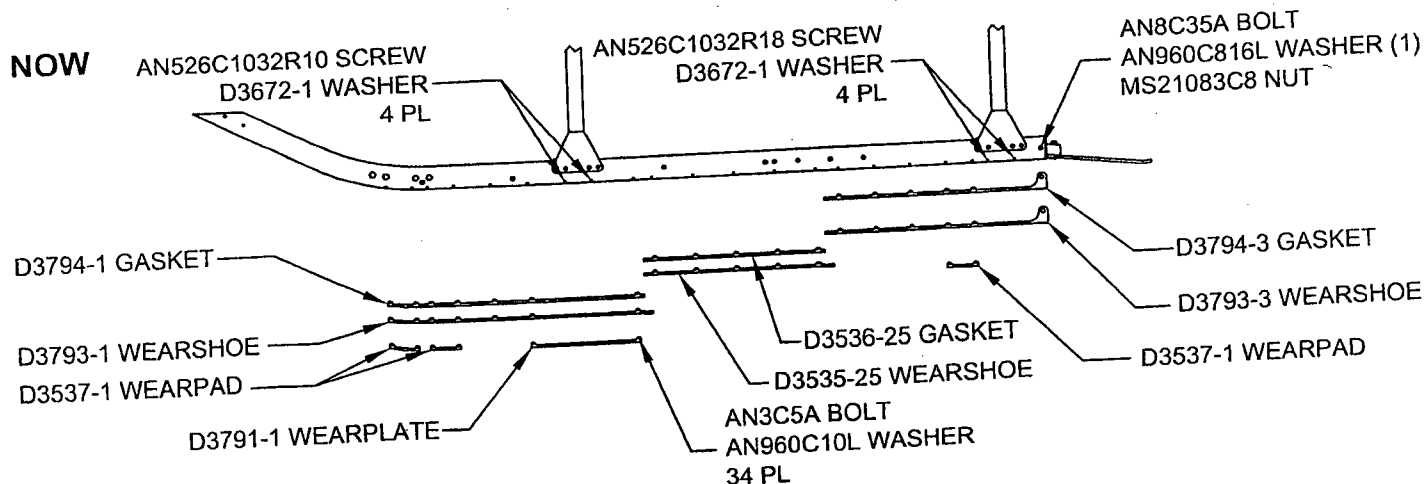
REF CANADIAN STC: SH99-7

THE WEARPLATES ON D350-636-011/-012/-013/-014 SKIDTUBES AT CHG 004 (AND LATER) HAVE BEEN MODIFIED AS SHOWN IN FIGURE 1 BELOW TO ELIMINATE THE POSSIBILITY OF INTERFERENCE BETWEEN THE WEARPLATES AND CROSSTUBE SADDLES AT INSTALLATION. THERE IS NEGLIGIBLE WEIGHT CHANGE ASSOCIATED WITH THIS MODIFICATION.

WAS



NOW



**FIGURE 1 - WEARPLATE MODIFICATION**

(AN526C1032RXX SCREW LOCATIONS NO LONGER USED TO MOUNT WEARSHOES)

A		NEW ISSUE		PH	08.05.14
REV.		DESCRIPTION		BY	DATE
DESIGN		PH		DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWN		PH			
CHECKED		B		DRAWING NO.	
MFG. APPR.		N/A		DSI 9413	
APPROVED		<del>PH</del>		TITLE	
DE APPR.		<del>PH</del>		WEARSHOE MODIFICATION	
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

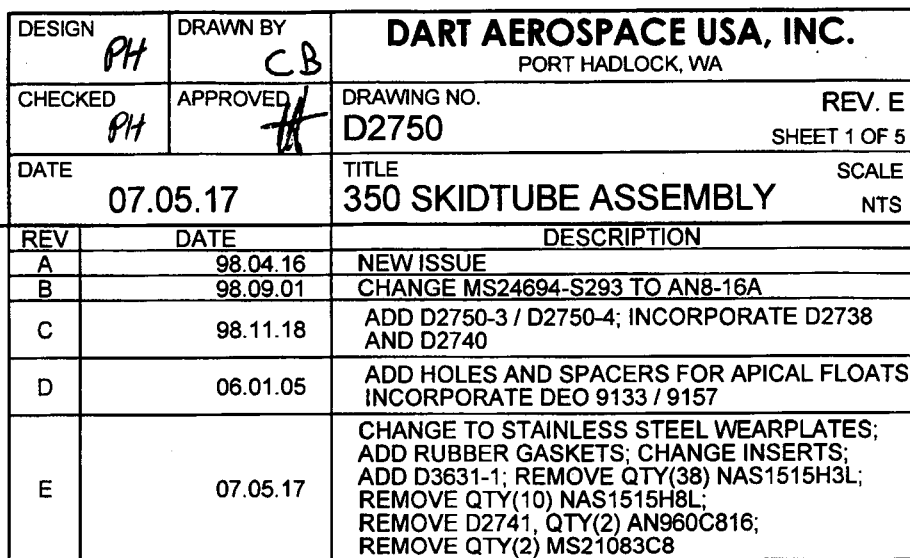
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries





RELEASED  
07-08-02

Qty -041	Qty -042	Qty -043	Qty -044	Part Number	Description
X				D2750-041	SKIDTUBE ASSEMBLY, LH
	X			D2750-042	SKIDTUBE ASSEMBLY, RH
		X		D2750-043	SKIDTUBE ASSEMBLY, LH
			X	D2750-044	SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-13	WEARSHOE
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3535-35	WEARSHOE
1	1	1	1	D3536-13	GASKET
1	1	1	1	D3536-25	GASKET
1	1	1	1	D3536-35	GASKET
5	5	5	5	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
42	42	42	42	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
38	38	38	38	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN3C7A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
46	46	46	46	AN960C10L	WASHER
2	2	2	2	AN960C816L	WASHER
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER
2	2	2	2	NAS1515H8L	WASHER

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CHECKED <i>PH</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D2750</b>	REV. E SHEET 2 OF 5
DATE <b>07.05.17</b>		TITLE <b>350 SKIDTUBE ASSEMBLY</b> SCALE NTS	

GENERAL NOTES:**RELEASED**  
*07-08-02*

1. ALL DIMENSIONS ARE IN INCHES.
2. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
3. MAKE FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
4. DAMAGE TOLERANCE ON BENDING:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 12 INCHES ABOVE THE GROUND. NO GOUGING IS ACCEPTABLE IN THE FLAT PORTION OF THE TUBE. GOUGES UP TO 0.020 ARE ACCEPTABLE IN THE BENT PORTION OF THE TUBE. TUBE O.D. SHOULD BE  $3.150 \pm 0.010$  IN THE FLAT PORTION OF THE TUBE. TUBE O.D. SHOULD BE  $3.15 \pm 0.030$  IN THE BENT PORTION OF THE TUBE.
5. ALL HOLES DRILLED ON CENTERLINES EXCEPT THOSE NOTED BY SECTIONS C-C, D-D AND F-F.
6. WELDING TO BE DONE PER DART QSI 004.
7. FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:  
MINIMUM YIELD TENSILE STRENGTH = 35 ksi  
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
8. FINISH:  
ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.  
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
9. INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED IN D2750-1/-2/-3/-4 WELDING DETAIL ON PAGE 4 AND 5. DRILL 'F' SIZE HOLES ( $\emptyset 0.297$ ) FOR WEARSHOE INSERTS.
10. D3488-041 (OR D3488-042) BLADE FITTING AND AN3C5A/AN3C7A WEARSHOE BOLTS TO BE INSTALLED USING SIKAFLEX-241 (OR EQUIVALENT) SEALANT.
11. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.

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NO. 157

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barclay Elliot  
Job number: 392301  
Part number: D350 636 012  
Description: 350 skid tube  
Welding Process: Tig[☒] Mig[ ]  
Base material: Aluminium  
Current: AC[☒] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[ ]  
Penetration: pass[☒] fail[ ]

UNACCEPTABLE

Cracks: pass[☒] fail[ ]  
Undercut: pass[☒] fail[ ]  
Pin holes: pass[☒] fail[ ]  
Overlap (cold lap): pass[☒] fail[ ]  
Porosity (surface): pass[☒] fail[ ]  
Coloration: pass[☒] fail[ ]

Qualifier Pat Duval Date of Test Coupon 08-05-23  
Welder Barclay Elliot Date of Test Coupon 08-05-28

The above named individual is qualified in accordance with AWS D17.1.2001 to weld



INSTALL ALS4-1032-225  
INSERTS (4 PLACES)  
AFTER FINISH

D2750-1 (LH) OR  
D2750-2 (RH)

INSTALL ALS4-1032-225  
WEARSHOE INSERTS (38 PLACES)  
AFTER FINISH

**D2750-041 ASSEMBLY (SHOWN)  
D2750-042 ASSEMBLY (OPPOSITE)**

BOND D2739 WEB INTO D2750-1 (OR D2750-2)  
OUTER TUBE WITH NON-STRUCTURAL  
SIKAFLEX-241 ADHESIVE PER DART QSI 015.  
NOTE: ENSURE THAT HOLES LINE UP.

BLACK ANTI-SKID

2.0  
(TYP)

1.78 (REF)  
(TO D2739 WEB)

D3488-041  
(OR D3488-042)

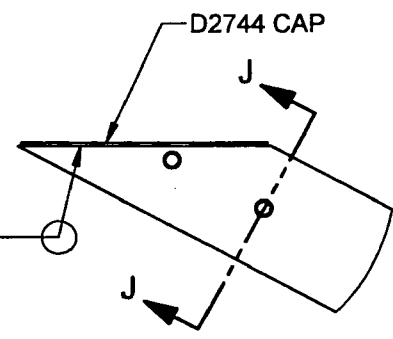
NO INSERT

WELDED SPACER  
NOT REQUIRED

D3535-35  
D3536-35

AN3C7A BOLT (REF)

**RELEASED**  
07.08.02



**DETAIL H**  
SCALE 1:5

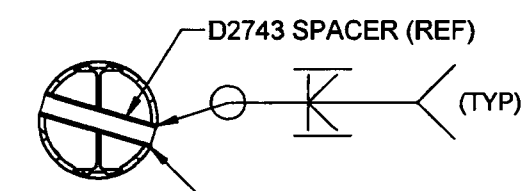
INSTALL:  
AN3C6A BOLT (1)  
AN960C10L WASHER (1)  
NAS1515H3L WASHER (1)  
(4 PLACES)

**SECTION J-J**  
SCALE 1:5

INSTALL AT AFTMOST  
D3537-1 WEARPAD:  
AN3C7A BOLTS (1)  
AN960C10L WASHER (1)  
(4 PLACES)

INSTALL:  
AN3C5A BOLT (1)  
AN960C10L WASHER (1)  
(38 PLACES)

**SECTION N-N**  
SCALE 1:5



**SECTION M-M**  
SCALE 1:5

- WELDING INSTRUCTIONS**
- 1) CHAMFER HOLE 0.050 x 45°
  - 2) INSERT D2743 SPACER
  - 3) WELD INTO PLACE
  - 4) GRIND WELD FLUSH
  - 5) DRILL OUT SPACER TO  $\phi 0.484$
  - 6) SPOT FACE  $\phi 0.750$  (SECTION P-P ONLY)

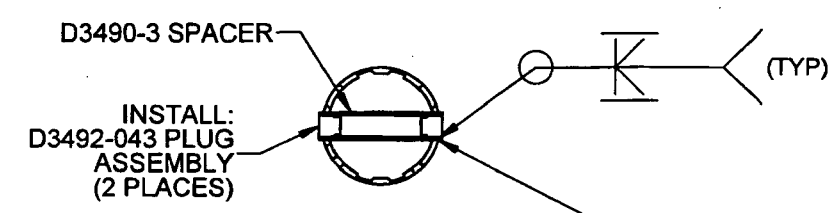
INSTALL:  
AN6C44A BOLT (1)  
D2745 BUSHING (2)  
D3631-1 WASHER (2)  
MS21043-6 NUT (1)  
(4 PLACES)

**SECTION Q-Q**  
SCALE 1:5

INSTALL:  
AN8C35A BOLT (1)  
AN960C816L WASHER (2)  
NAS1515H8L WASHER (2)  
MS21083C8 NUT (1)

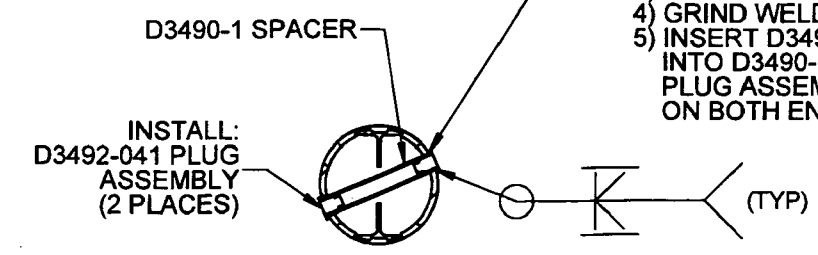
**SECTION R-R**  
SCALE 1:5

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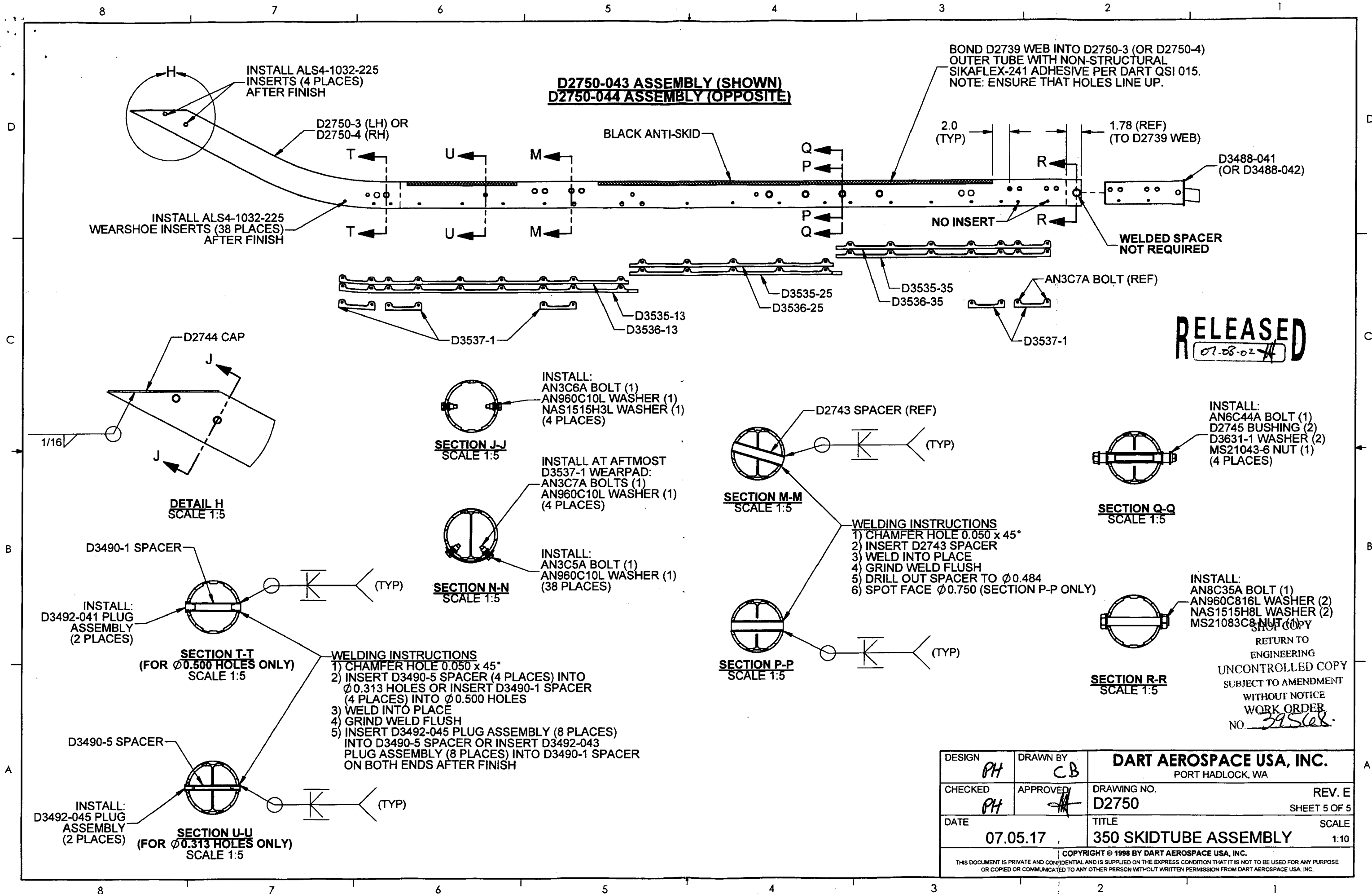
**SECTION K-K**  
(FOR  $\phi 0.750$  HOLES ONLY)  
SCALE 1:5

- WELDING INSTRUCTIONS**
- 1) CHAMFER HOLE 0.050 x 45°
  - 2) INSERT D3490-1 SPACER (4 PLACES) INTO  $\phi 0.500$  HOLES OR INSERT D3490-3 SPACER (4 PLACES) INTO  $\phi 0.750$  HOLES
  - 3) WELD INTO PLACE
  - 4) GRIND WELD FLUSH
  - 5) INSERT D3492-041 PLUG ASSEMBLY (8 PLACES) INTO D3490-1 SPACER OR INSERT D3492-043 PLUG ASSEMBLY (8 PLACES) INTO D3490-3 SPACER ON BOTH ENDS AFTER FINISH



**SECTION L-L**  
(FOR  $\phi 0.500$  HOLES ONLY)  
SCALE 1:5

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DATE <b>07.05.17</b>		TITLE <b>350 SKIDTUBE ASSEMBLY</b>	SCALE 1:10
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DATE 07.05.17		TITLE 350 SKIDTUBE ASSEMBLY	SCALE 1:10
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